

**The Role of Education and Public Outreach (E/PO)  
in the Small Explorer (SMEX)  
Concept Study Reports**

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# OSS Education and Outreach

## What Are We Trying To Do?

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- Share the excitement of space science discoveries with the public
- Enhance the quality of science, mathematics and technology education, particularly at the pre-college level
- Help create our 21st century scientific and technical workforce

# **OSS Education and Public Outreach**

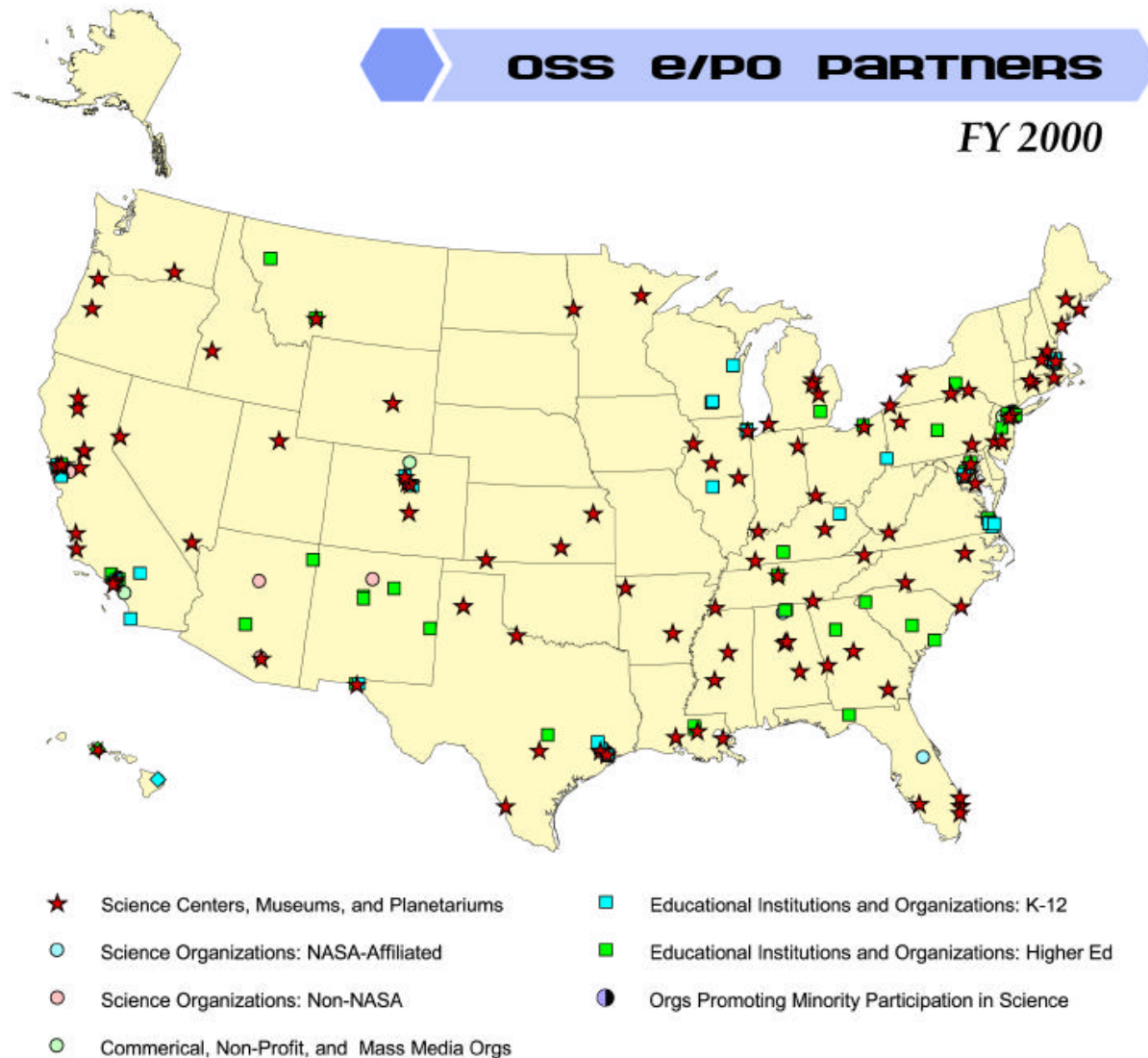
## **Where Are We Now?**

- OSS is firmly committed to making a substantive contribution to pre-college education and the broad public understanding of science, mathematics, and technology
- A major national program of space science education is now underway. For further information see:
  - The OSS FY 2000 E/PO Annual Report (January 2001)
  - The OSS E/PO Newsletters (January and May 2001)
  - The OSS E/PO Homepage

- Includes over 1500 discrete events at venues encompassing all 50 states, the District of Columbia, Guam, Australia, Canada, Mexico, and Peru.



- Involves over 200 partner institutions and organizations.



# **OSS Education and Public Outreach**

## **What Are We Looking For In The Concept Studies?**

- A credible story containing specifics and commitments/reality not rhetoric
  - See the SMEX Concept Study Guidelines
  - A good case can be laid out in 4 pages
  - Letters of support/commitment from E/PO partners are important
- A program that is aligned to the OSS E/PO Strategy and E/PO Implementation Plan
  - The content of both these documents is directly reflected in the Evaluation Criteria which spell out in detail what is meant by the phrase the “quality of the proposed E/PO program” contained in the Study Guidelines
- A commitment to adequately fund the proposed E/PO program
  - OSS Guideline: 1-2% of the total mission cost through all phases excluding launch vehicles

**E/PO will play a role in the downselection process**

# **How Will We Judge Quality?**

## **General Evaluation Criteria**

The general criteria to be applied to the evaluation of the E/PO component of all Concept Study Reports are:

- The quality, scope and realism of the planned E/PO program including the adequacy, appropriateness, and realism of the proposed budget
- The capability and commitment of the PI and the PI's team and the direct involvement of one or more science team members in overseeing and carrying out the planned E/PO program
- The establishment or continuation of effective partnerships with institutions and/or personnel in the fields of education and/or public outreach as the basis for and an integral element of the planned E/PO program
- The adequacy of plans for evaluating the effectiveness and impact of the proposed education and outreach activity

# **How Will We Judge Quality?**

## **Specific Evaluation Criteria**

To further ensure that the goals and objectives of the OSS E/PO strategy are realized in practice, Concept Studies will also be evaluated using the following specific criteria:

- For programs dealing directly with or strongly affecting the formal education system (e.g., through teacher workshops or student programs carried out at informal education institutions such as science museums and planetariums), the degree to which the planned E/PO effort is aligned with and linked to nationally recognized and endorsed reform efforts and/or reform efforts at the state or local levels
- The degree to which the planned effort contributes to the training of underserved and/or underutilized groups and their involvement in and broad understanding of science and technology
- The potential for the planned E/PO activity to expand its scope by having an impact beyond the direct beneficiaries, reaching large audiences, being suitable for replication or broad dissemination, or drawing on resources beyond those directly requested in the proposal
- Plans (or where appropriate) for coordination of the E/PO program with other OSS-sponsored education and outreach programs



## **How Will We Judge Quality?**

### **Mission Criterion**

- The relationship of the planned E/PO program to any unique scientific or technical aspects of the mission

## **OSS Education and Public Outreach Expectations**

Based on the funding guidelines..., the E/PO programs described in the Concept Study reports will involve the expenditure of substantial resources. Therefore, it is expected that planned E/PO programs will have a breadth and depth commensurate with those resources. Such programs are expected to be multi-faceted in nature, address a number of different aspects of education and outreach..., and have state, regional, or national scope.

# **OSS Education and Public Outreach**

## **How Are We Going To Do The Evaluation?**

The process will be part of and exactly parallel the TMCO process

- Will involve an evaluation by a panel of experts, the formulation of questions where clarifications are needed, participation in site visits, and the preparation of summary findings for consideration by the Selecting Official as part of the overall evaluation and selection process

# **OSS Education and Public Outreach Sources of Information**

- A Short Reading List:
  - OSS Education and Public Outreach Strategy
  - OSS Education and Public Outreach Implementation Plan
  - OSS Explanatory Guide for the Education/Public Outreach Evaluation Criteria
  - OSS FY 2000 Education and Public Outreach Annual Report
- The OSS “Explanatory Guide”
  - Contains answers to “Frequently Asked Questions”
  - Describes in more detail what most of the Evaluation Criteria mean (two new criteria have been added)
  - Was developed to ensure that E/PO efforts are prepared and evaluated on a consistent basis

# **OSS Education and Public Outreach**

## **Sources of Assistance**

- Call your local Broker/Facilitator or the appropriate OSS Education Forum
  - The Support Network is there to help, but is not responsible for preparing the E/PO portion of your Concept Study Report
- In accord with the operating principles developed by the Support Network, discussions with individual Teams developing concept studies will be treated as proprietary
- Contact information is available through the OSS E/PO Homepage

# Support Network

## Office of Space Science Education and Public Outreach



### ○ Forums

- **Astronomical Search for Origins and Planetary Systems**
  - Space Telescope Science Institute (STScI)
- **Structure and Evolution of the Universe (SEU)**
  - Smithsonian Astrophysical Observatory
- **Solar System Exploration (SSE)**
  - Jet Propulsion Laboratory
- **Sun-Earth Connection (SEC)**
  - Goddard Space Flight Center
  - University of California at Berkeley

### ☆ Broker/ Facilitators

- Depaul University (DU)
- Lunar and Planetary Institute (LPI)
- Ohio Aerospace Institute (OAI)
- SouthEast Regional ClearingHouse (SERCH)
- Space Science Institute (SSI)

# **OSS Education and Public Outreach**

## **Some Summary Observations**

- OSS is serious about education and public outreach
  - A major national program is now underway
- E/PO will be an integral element of the evaluation and selection process
  - E/PO has made a difference in some selections
- OSS has seen a significant evolution in the level of maturity, ambition and sophistication in mission E/PO programs over the past several years
  - We have high expectations for all missions including SMEX missions
- Resources are available to help the PI's in developing their Concept Studies
  - Contact the Forums and Broker/Facilitators for help
  - Read the “Explanatory Guide” and other available documentation
- Treat E/PO with the same rigor and professionalism that you treat the science and engineering aspects of your concept study